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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,866	09/22/2003	Toru Takayama	0756-7201	4319
31780	7590	10/04/2004	EXAMINER	
ERIC ROBINSON PMB 955 21010 SOUTHBANK ST. POTOMAC FALLS, VA 20165			LE, THAO P	
			ART UNIT	PAPER NUMBER
			2818	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/664,866

Applicant(s)

TAKAYAMA ET AL.

Examiner

Thao P. Le

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 15-16 is/are rejected.
- 7) ☒ Claim(s) 9-14 and 17-22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/22/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

DETAILED ACTION

**Priority**

1. Acknowledge is made of applicants' claim for foreign priority base on an application 2002-276402 filed in Japan on 09/20/02.

***Information Disclosure Statement***

2. Information Disclosure Statement (IDS) filed on **Sept. 22, 2003** and made of record. The references cited on the PTOL 1449 form have been considered.
3. Claims 1-22 are pending.

**Claim Objection**

4. Claims 9-14, 17-22 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim ("any one of claims 1 to 8" or "according to claim 15 or 16"). See MPEP § 608.01(n). Accordingly, the claims 9-14 and 17-22 have not been further treated on the merits.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**6. Claims 1, 3, 5-7, 15 are rejected under 35 USC 102 (a) as being anticipated by Hideki, JP 7321335, submitted by applicant as prior art.**

Regarding claims 1, 3, 5-7, 15, Kideki discloses a method for manufacturing a semiconductor device similar to what recited in those claims above of present application. Kideki discloses the method including a heat treatment step of pulsed light irradiation comprising: forming separately island-like light-absorbing layers 105 that are capable of absorbing the pulsed light over a glass substrate 101, forming a semiconductor layer 103 and an insulating layer 102 overlapping with the semiconductor layer between the glass substrate and the light-absorbing layers, performing the heat treatment for the semiconductor layer and the insulating layer by selectively heating the light-absorbing layers through the pulsed light irradiation (Abstract, Figs. 4-5), forming gate electrode 108 over the layers.

**Claim Rejections - 35 USC § 103**

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**8. Claims 2, 4, 8, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hideki, JP 7321335, submitted by applicant as prior art.**

Regarding claims 2, 4, 8, 16, Kideki discloses a method for manufacturing a semiconductor device similar to what recited in those claims above of present application. Kideki discloses the method including a heat treatment step of pulsed light irradiation comprising: forming separately island-like light-absorbing layers 105 that are capable of absorbing the pulsed light over a glass substrate 101, forming a semiconductor layer 103 and an insulating layer 102 overlapping with the semiconductor layer between the glass substrate and the light-absorbing layers, performing the heat treatment for the semiconductor layer and the insulating layer by selectively heating the light-absorbing layers through the pulsed light irradiation (Abstract, Figs. 4-5), forming gate electrode 108 over the layers. Hideki doesn't

disclose that the island-like light-absorbing layers whose transmission factor of pulsed light is 70 percent or less over a glass substrate whose transmission factor of the pulsed light is 70 percent or more. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to obtain a material having transmission factor of pulsed light is 70 percent or less in order to obtain enough light and also not to over absorb light to avoid damaging the light-absorbing layers and underlying layers.

9. Yamamoto Takashi, Furuta Mamoru (JP 2001102585) also discloses similar method of forming a semiconductor device as recited in instant application's claims; forming an island-form metallic film 31 (light-absorbing layer) on a glass substrate 11, irradiating light through the layers to improve the efficiencies of the activation of drain/source regions.

10. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao P. Le whose telephone number is 571-272-1785. The examiner can normally be reached on M-T (7-6).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thao P. Le  
Examiner  
Art Unit 2818  
Sept. 25, 2004.